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(Modified) PTO/SB/21 (6-98)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission **7+**

Application Number 10/004,201

Filing Date November 1, 2001

First Named Inventor Claus Bornaes, et al.

Group Art Unit Unassigned

Examiner Name Unassigned

Attorney Docket Number 0220us210

ENCLOSURES (check all that apply)

- ☐ Fee Transmittal Form
☐ Fee Attached
☐ Amendment / Response
☐ After Final
☐ Affidavits/declaration(s)
☐ Extension of Time Request
☐ Express Abandonment Request
☒ Information Disclosure Statement
☒ PTO-SB/08 (1449), 50 references
☐ Response to Missing Parts/
Incomplete Application
☐ Response to Missing
Parts under 37 CFR
1.52 or 1.53

- ☐ Assignment Papers
(for an Application)
☐ Drawing(s)
☐ Licensing-related Papers
☐ Petition Routing Slip (PTO/SB/69)
and Accompanying Petition
☐ Petition to Convert to a
Provisional Application
☐ Power of Attorney, Revocation
Change of Correspondence
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☐ Terminal Disclaimer
☐ Small Entity Statement
☐ Request for Refund

- ☐ After Allowance Communication
to Group
☐ Appeal Communication to Board
of Appeals and Interferences
☐ Appeal Communication to Group
(Appeal Notice, Brief, Reply Brief)
☐ Proprietary Information
☐ Status Letter
☒ Additional Enclosure(s)
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Please charge Deposit Account No. 50-0990 for any additional fees associated with this paper or during the pendency of this application, including any extensions of time for consideration of the documents enclosed.

Remarks

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm
or
Individual name

Joanne R. Petithory, Reg. No. 42,995
Maxygen, Inc.

Signature

Joanne R. Petithory

Date

December 2, 2002

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: December 2, 2002

Typed or printed name

Julie K. Mausen

Signature

Julie K. Mausen

Date

December 2, 2002



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By Julie K. Mausen
Julie K. Mausen

RECEIVED

Attorney Docket No.: 0220us210

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Claus Bornaes, *et al.*

Application No.: 10/004,201

Filed: November 1, 2001

For: New Multimeric Interferon Beta
Polypeptides

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE
STATEMENT UNDER
37 CFR § 1.97 and § 1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO-SB/08 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

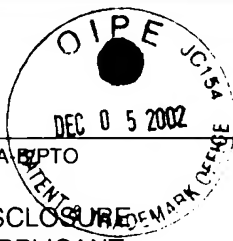
Applicants believe that no fee is required for submission of this statement, since it is being submitted prior to a first Office action on the merits. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0990. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Joanne R. Petithory
Reg. No. 42,995

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Substitute for form 1449A, PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/004,201
Filing Date	November 01, 2001
First Named Inventor	Claus Bornaes, et al.
Group Art Unit	1644
Examiner Name	Unassigned
Attorney Docket Number	0220us210

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
	AA	4,588,585		Mark et al.	05/13/1986	
	AB	4,686,191		Itoh et al.	08/11/1987	
	AC	4,751,077		Bell et al.	06/14/1988	
	AD	4,769,233		Bell et al.	09/06/1988	
	AE	4,904,584		Shaw	02/27/1990	
	AF	4,914,033		Bell et al.	04/03/1990	
	AG	4,917,888		Katre et al.	04/17/1990	
	AH	4,966,843		McCormick et al.	10/30/1990	
	AI	5,218,092		Sasaki et al.	06/08/1993	
	AJ	5,376,567		McCormick et al.	12/27/1994	
	AK	5,382,657		Karasiewicz et al.	01/17/1995	
	AL	5,545,723		Goetz et al.	08/13/1996	
	AM	5,795,779		McCormick et al.	08/18/1998	
	AN	5,908,626		Chang et al.	06/01/1999	

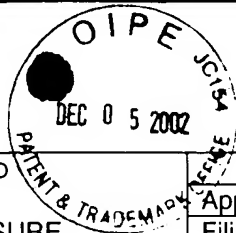
FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	AO	EP	0 083 069	A2	Kyowa Hakko Kogyo Co., Ltd.	07/06/1983		
	AP	EP	0 041 313	A2	Biogen, Inc.	12/09/1981		
	AQ	EP	0 260 350	A1	Cetus Corporation	03/23/1988		
	AR	EP	0 287 075	B2	Dr. Rentschler Biotechnologie GmbH	10/19/1988		X
	AS	EP	0 287 075 (English language translation of document AR)	B2	Dr. Rentschler Biotechnologie GmbH	10/19/1988		

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

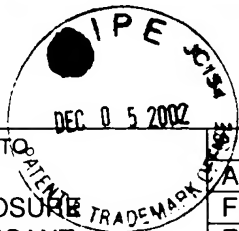


Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known	
	Application Number	10/004,201
	Filing Date	November 01, 2001
	First Named Inventor	Claus Bornaes, et al.
	Group Art Unit	1644
	Examiner Name	Unassigned
	Attorney Docket Number	0220us210

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	BJ	Derwent Abstract 012152872 for WO 98/48018, Cite No. AY	
	BK	Derwent Abstract 07723097 for JP 63267296, Cite No. BI	
	BL	Fierlbeck et al., "Neutralising interferon β antibodies in melanoma patients treated with recombinant and natural interferon β " <i>Cancer Immunol Immunother</i> (1994) 39:263-268	
	BM	KARPUSAS et al., "The Structure of Human Interferon- β at 2.2 A resolution" <i>Proc. Nat. Acad. Sci. USA</i> (1997) 94:11813-11818	
	BN	KARPUSAS et al., "The Structure of Human Interferon- β : Implications for activity", <i>CMLS</i> 54 (1998) 1203-1216	
	BO	MAYORGA et al., "Antibodies to Commercially Available Interferon-Beta Molecules in Multiple Sclerosis Patients Treated with Natural Interferon-Beta" <i>Int. Arch. Allergy Immunol</i> 1999; 118:368-371	
	BP	MUNSCHAUER et al., "Managing Side Effects of Interferon-Beta in Patients with Relapsing-Remitting Multiple Sclerosis" <i>Clinical Therapeutics</i> vol. 19, No 5, 1997 883-893	
	BQ	REDLICH et al., "Antibodies that neutralize human β interferon biologic activity recognizing a linear epitope: Analysis by synthetic peptide mapping" <i>Proc. Natl. Acad. Sci. USA</i> vol. 88, pp. 4040-4044 May 1991	
	BR	RUDICK et al., "Incidence and significance of neutralizing antibodies to interferon beta-1a in multiple sclerosis" <i>Neurology</i> May 1989, 50: 1266-1272	
	BS	RUNKEL et al., 1998, <i>Jour. Biol. Chem.</i> "Difference in activity between α and β Type I Interferons Explored by Mutational Analysis" 273, No. 14, pp. 8003-8008	
	BT	RUNKEL et al., "Structural and Functional Differences Between Glycosylated and Non-Glycosylated Forms of Human Interferon- β (IFN- β)" <i>Pharmaceutical Research</i> vol. 15, No 4, 1998, 641-649	
	BU	SENDA et al., "Refined Crystal Structure of Recombinant Murine Interferon- β at 2.15 A Resolution" <i>J. Mol. Biol.</i> (1995) 253, 187-207	

Examiner Signature		Date Considered	
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Substitute for form 1449A-B/PTO

Complete if Known

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number **10/004,201**
Filing Date **November 01, 2001**
First Named Inventor **Claus Bornaes, et al.**
Group Art Unit **1644**
Examiner Name **Unassigned**
Attorney Docket Number **0220us210**

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	AT	EP	0 529 300	B1	Rentschler Biotechnologie GmbH & Co.	03/03/93		X
	AU	EP	0 529 300 (English language translation of document AT)	B1	Rentschler Biotechnologie GmbH & Co.	03/03/93		
	AV	EP	0 593 868	A1	Hoffmann-La Roche Inc.	04/27/1994		
	AW	WO	87/00056	A1	Cetus Corporation	01/15/1987		
	AX	WO	95/25170	A1	Biogen, Inc.	09/21/1995		
	AY	WO	98/48018	A1	Fraun-Hofer- Gesellschaft zur Forderung der Angewandten	10/29/1998	Derwent Abstract in English: item BJ	
	AZ	WO	99/02710	A1	Beth Israel Deaconess Medical Center	01/21/1999		
	BA	WO	99/03887	A1	Bolder Biotechnology, Inc.	01/28/1999		
	BB	WO	99/38891	A1	Beth Israel Deaconess Medical Center	08/05/1999		
	BC	WO	99/55377	A2	Applied Research Holdings	11/04/1999		
	BD	WO	99/67291	A2	Immunex Corporation	12/29/1999		
	BE	WO	00/23114	A3	Biogen, Inc.	04/27/2000		
	BF	WO	00/23472	A2	Biogen, Inc.	04/27/2000		
	BG	WO	00/26354	A1	Novo Nordisk A/S	05/11/2000		
	BH	WO	01/15736	A2	Maxygen ApS	03/08/2001		
	BI	JP	63267296		Toray Ind. Inc.	11/04/1988	Derwent Abstract in English: item BK	

Examiner Signature	Date Considered
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	BV	STEWART et al., "Chemical Mutagenesis of Human Interferon- β : Construction, Expression in E. coli, and Biological Activity of Sodium Bisulfite-Induced Mutations" <i>DNA</i> , Vol 6 no 2 1987 p. 119-128	
	BW	TANIGUCHI et al, "The nucleotide sequence of human fibroblast interferon cDNA", <i>Gene</i> 10 (1980) 11-15	
	BX	YONG et al., "Interferon beta in the treatment of multiple sclerosis", <i>Neurology</i> 1998; 51: 682-689	

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